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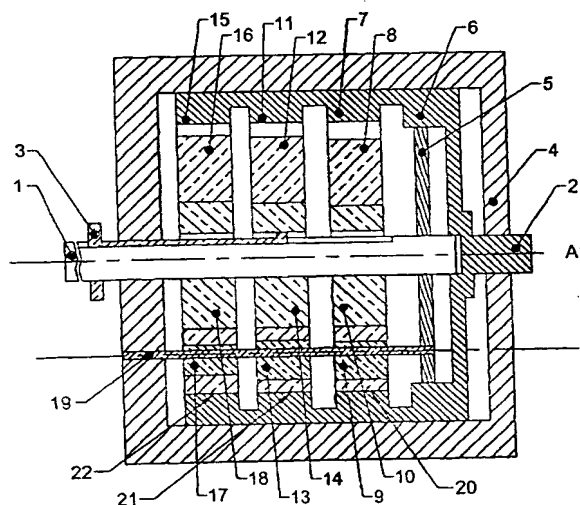
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(54) Title: ECCENTRIC GEARBOX



(57) **Abstract:** An eccentric gearbox with selectable large speed ratio, in this gearbox many eccentric gear (8, 12, 16) pairs are assembled in parallel, and are connected to a common input shaft (1) and a common output shaft (2). In every gear pair (8, 12, 16), one gear keeps its orientation fixed with respect to a fixed part called as fixed gear (8, 12, 16) and another gear that rotates about its own axis is called as moving gear (7, 11, 15). Difference in number of teeth on the two gears of a gear pair is kept to one tooth or more. Through proper selection of a particular gear pair any speed ratio can be selected. In this way, it is possible to make a compact gearbox, with multiple large speed ratios. Such a gear box can be used in automobiles, robot manipulators, earth moving equipments, space applications, toys, hand held tools and many other applications.